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FISHERY MARKET NEWS

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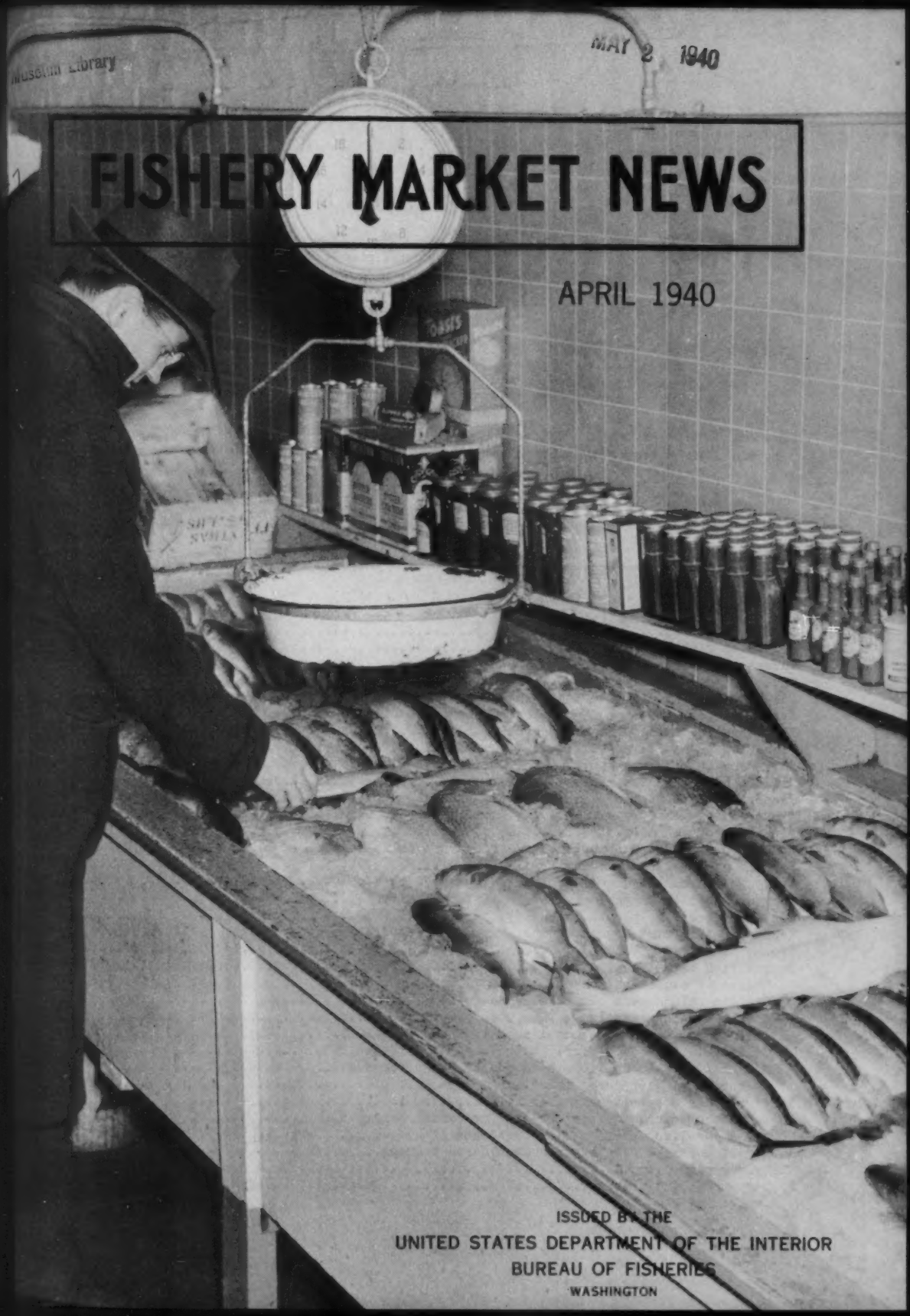

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UNITED STATES
DEPARTMENT OF THE INTERIOR
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FISHERY MARKET NEWS

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Applications for FISHERY MARKET NEWS, which is distributed free to members of the fishery industry and allied interests, should be addressed to the Commissioner of Fisheries, Washington, D. C. Contributions for publication are welcome.

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FISHERY MARKET NEWS

A REVIEW OF CONDITIONS AND TRENDS OF THE COMMERCIAL FISHERIES

April 1940 | Washington, D. C. | Vol. 2, No. 4

SUMMARY

Special Articles

Fresh-water turtles.--Fresh-water turtles are sold in most of our eastern, southern, and midwestern markets. In these sections they are highly prized as food by a limited number of turtle "connoisseurs".

Fresh Fish

February vessel landings of fresh fish at Boston, Gloucester, and Portland exceeded 27 million pounds, worth $898,000 to the fishermen. Haddock contributed over one-third of this volume and almost one-half of the value, while rosefish, cod, flounders, and pollock also provided important portions of the totals.

There was a continuation during February of the rise in the average price paid for landings at the Boston Fish Pier. An average of 3.62 cents per pound was received by the fishermen during the month. Boston receipts in February totaled 21,780,000 pounds.

New Bedford landings for the 12 months of 1939 approximated 27½ million pounds, worth 1 1/3 million dollars to the fishermen.

Halibut, whitefish, and sauger were the most important items in February shipments to the Chicago fresh fish markets.

With the halibut season on the Pacific coast opening April 1, fresh halibut began to arrive on the Seattle market. By April 8, 261,000 pounds of halibut had been received.

Frozen Fish

Cold-storage holdings on hand throughout the United States and Alaska on March 15 amounted to 45½ million pounds, representing a continuation of the seasonal decline. Market News reports tending to indicate distribution of these stocks showed 5,041,000 pounds on hand in Boston on March 27; 5,248,000 pounds on hand in New York City on March 28; and 4,182,000 pounds held in Chicago on March 28. Total United States and Alaska freezings of fishery products amounting to 6,383,000 pounds were recorded for the month ending March 15.

Canned Fish

There were 1,369,000 standard cases of unsold canned salmon in the hands of packers on March 31, compared with 1,322,000 cases on hand a year previous.

This season's pack of California sardines to the end of February constitutes a 29 percent increase over the pack for a corresponding part of the 1938-39 season. The tuna pack also registered an increase, the pack for the first two months of 1940 being 49 percent larger than the pack of these months in 1939. A 125 percent increase over the January and February 1939 total was recorded by the mackerel pack for the first two months of 1940.

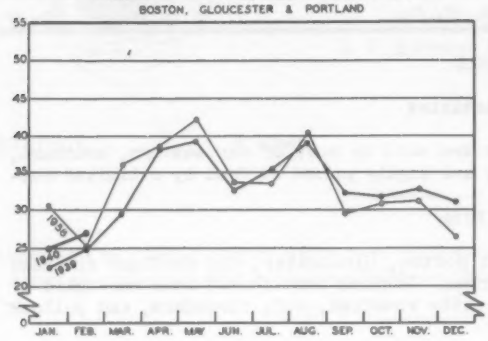
Foreign Trade

February 1940 imports of edible fishery products, while a decrease from January 1940, were 15 percent larger than the February 1939 figure. Exports for February 1940 were also large, totaling 18,144,000 pounds, which combined with the January total amounts to 35,396,000 pounds, constituting the largest 2-month total for exports for any period since February-March 1937. Imports for February totaled 31,115,000 pounds.

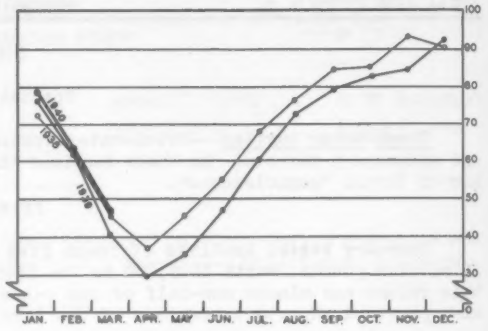
TRENDS OF FISHERY TRADE

IN MILLIONS OF POUNDS

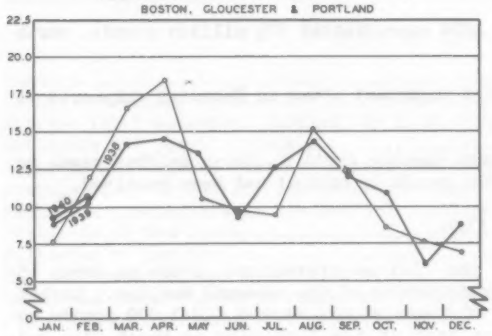
VESSEL LANDINGS, ALL FRESH FISH
BOSTON, GLOUCESTER & PORTLAND



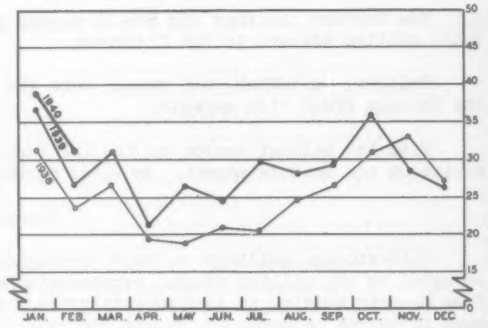
DOMESTIC COLD-STORAGE HOLDINGS OF FROZEN FISH



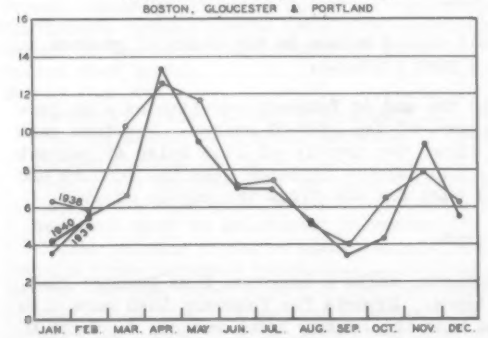
VESSEL LANDINGS, FRESH HADDOCK
BOSTON, GLOUCESTER & PORTLAND



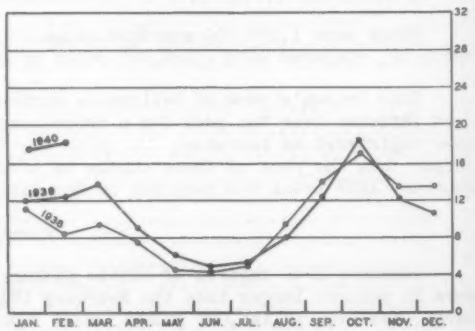
IMPORTS OF EDIBLE FISHERY COMMODITIES



VESSEL LANDINGS, FRESH COD
BOSTON, GLOUCESTER & PORTLAND



EXPORTS OF EDIBLE FISHERY COMMODITIES



MARKETS FOR FRESH-WATER TURTLES

By F. F. Johnson, Assistant Chief
Division of Fishery Industries

U. S. Bureau of Fisheries

The markets for fresh-water turtles, in common with those for many other aquatic commodities, follow no well-defined geographical pattern. Through custom or superior facilities, certain of our cities have become "good" markets for certain products. Thus, St. Louis is an excellent market for the Atlantic coast whiting because of the use of this fish in the sandwiches which are popular in that area; Pacific halibut leads in Denver's fresh fish trade; Pacific sablefish is most important in the fresh fish trade of Oklahoma City; and the Great Lakes blue pike leads in Buffalo.

Some of our better markets for fresh-water turtles are in the cities of Philadelphia, Chicago, Baltimore, Louisville, Washington, St. Louis, Pittsburgh, Cincinnati, and New Orleans. Cleveland and New York are considered fair markets, while the demand in Kansas City, Omaha, Nashville, and Detroit is very small.

Inquiries recently made among seafood dealers in the cities listed in the preceding paragraph indicate that the demand for fresh-water turtles rarely exceeds the present supply. Louisville was the only city in which the consumption was said to be increasing. Philadelphia and Baltimore have been and are considered among our better turtle markets, but several of the dealers in these cities reported that the consumption is declining. These dealers pointed out that in earlier years the use of turtles was associated with the consumption of liquors. Thus, there was a sharp decline in the use of turtles with the advent of prohibition,and since its repeal it has been difficult to popularize this commodity among those of the younger generation.

By far, the bulk of the consumption of turtles in cities is through restaurants, hotels, clubs, and similar outlets. Their use to any considerable extent in the home is apparently restricted to the smaller communities near where they are captured, and particularly to the fisherfolk themselves.

The common snapping turtle is the one most frequently sold through our city markets. Its habitat is quite general over the eastern half of the United States. The usual size range of specimens found in the markets is from about 4 to 25 pounds, although they have been known to attain weights of 75 pounds and even more. The smaller specimens are more tender, however, and consequently preferred for food. The yield of meat, including leg bones, from snapping turtles, is said to be about one-half the weight of the live turtle. Wholesale prices for live snapping turtles in cities surveyed range from 6 to 12 cents, and for turtle meat, from 10 to 20 cents.

The alligator snapping turtle, which is said to reach weights of more than 200 pounds, is found in southern areas overlapping the range of the common snapper. It is found in the markets of St. Louis, New Orleans, and elsewhere, particularly in the South.

Several species of soft-shell turtles are used for food and are generally acclaimed as being delicious. These turtles seldom reach the large city markets but are said to be handled to a moderate extent in the local markets in the areas which they frequent. They are particularly popular as a food among those who capture turtles for sale.

Numerous other species of fresh-water turtles are used as food. Among such species, Pope 1/ lists the Mississippi and common map turtles, the Pacific pond turtle, the Mobile turtle, the Suwannee turtle, the red-bellied and yellow-bellied turtles, the chicken turtle, and Troost's turtle. Wood turtles and painted turtles also are said to be eaten locally at times. It is reported that the desert tortoise probably has always been eaten by the Indians

1/ Turtles of the United States and Canada, by Clifford H. Pope. Published by Alfred A. Knopf, Inc. New York City. 1939.

and by prospectors when other food was not available. The Creek Indians are reported to have relished gopher tortoise and it is said that they are eaten in various parts of their areas of abundance.

Probably the bulk of the snappers sold in the markets are captured while they are in hibernation. During the autumn and early winter they collect and "mud up" for the winter. Favorite places for hibernation are in old muskrat burrows. The turtle fisherman equips himself with an iron rod with a hook at one end and sharpened at the other. The sharp end is prodded into the mud along the banks of streams until the turtle, which feels to the fisherman much like a chunk of wood, is encountered. It is then pulled out with the hook. Turtle fishermen pride themselves on their ability to locate likely spots where turtles may be hibernating. The preference of turtles for muskrat holes as places for hibernation is indicated by one report of the capture of 26 turtles from one burrow, and another of taking 1,420 pounds from a single hole. Snappers also congregate about and under old logs. An instance was reported of a fisherman who obtained 20 turtles weighing from 10 to 20 pounds each under a log in one of the sloughs of the Mississippi River.

Other apparatus used in the capture of snapping turtles include trot lines, haul seines, fyke or hoop nets, and turtle pots or traps. Soft-shell turtles are taken by trot lines, fyke nets, pots, spears, and haul seines.

It is reported that fishermen or others in turtle fishing communities frequently maintain pens for storing the live snapping turtles until they can be marketed most advantageously.

Records compiled by the Fishery Market News Service of the Bureau of Fisheries at Chicago and New York permit more complete analyses of the markets for turtles in these two cities than are possible elsewhere. Receipts of live fresh-water turtles of all kinds in the Chicago market areas during 1939 aggregated 9,800 pounds, while turtle meat amounted to 1,600 pounds. The States of origin for these shipments were, in order of their importance: Minnesota, Missouri, Iowa, Wisconsin, Louisiana, Michigan, New York, Florida, Maryland, and Mississippi. About two-thirds of the live turtles were received by truck from the nearby States of Minnesota, Missouri, Wisconsin, Iowa, and Michigan. Nearly half of the turtle meat came from Louisiana, with smaller quantities from Wisconsin and Florida. The monthly receipts of turtle products in Chicago during 1939, in terms of percentages of the total for the year, were as follows: February, 22; April and December, each 19; July, 14; October, 8; August, 7; June, 6; September, 3; May, 1; and November, less than one-half of 1. There were no receipts in January or March. It is the opinion of market men in Chicago that aside from the seasonal fluctuation the demand for fresh-water turtles has varied but little in the past 10 years. Here, as in most other cities, the principal medium for the consumption of turtles is through restaurants, clubs, taverns, and hotels, with some demand from southern-born whites who have come from sections of the South where turtles have long been esteemed, and to a lesser degree from Chinese and Negroes. Live snapping turtles arriving in the Chicago markets during the spring or summer are usually butchered and the meat frozen for the more active fall and winter trade. Boxes and barrels used for the shipment of turtles have numerous holes bored through the sides to admit fresh air and prevent suffocation of the turtles during shipment. Such a precautionary measure is necessary since turtles must be alive to be marketable.

Where shipments are reasonably small and sale will remove the turtles within a few days, they are usually left in the shipping containers until marketed; however, concerns handling turtles in large quantities usually transfer them to dark, damp pits or large wooden bins having from 6 to 8 inches of water at one end and clean sand above the water level at the other. In such storage the turtles are fed and may be kept alive and healthy for many months.

The Chicago fresh-water turtle market is based almost entirely on snapping turtles; other kinds of hard-shell turtles and soft-shell turtles amount to less than 2 percent of the annual market transactions.

Snapping turtles received in Chicago usually range in size from a minimum of 5 pounds to a maximum of 40 pounds each, with specimens weighing from 5 to 15 pounds most desired. Soft-shell turtles vary from 3 to 8 pounds in weight, with 3 to 5 pounds as the preferred sizes. Other hard-shell turtles frequently called "terrapin", "land terrapin", or "mud terrapin" vary from about 6 to 10 inches in width of shell or "carapace".

New York's market receipts of live fresh-water turtles during the last 10 months of 1938 totaled 7,700 pounds, two-thirds of which arrived by motor truck and nearly six-tenths

of which were received in April. Receipts of turtle meat were negligible. States of origin of shipments of fresh-water turtles to New York during the 10-month period, in order of their importance, were: New York, Delaware, Virginia, New Jersey, Maryland, and Florida. Dealers in New York distinguish among snapping turtles, soft-shell turtles, and "sliders". The latter term applies to the several species of hard-shell turtles other than snappers. It is said that the principal market for snapping turtles is among the Chinese. Soft-shell turtles are seldom sold in New York and are received mainly on order by people of southern birth for special occasions. Sliders are sold principally to scientific or biological supply houses, with a few going to the Chinese trade for food.

In dressing the turtle, the first step is the removal of the head. This can be rather easily accomplished in the case of the snapper by causing it to snap at a stick. It grasps the stick with a tenacious hold and the head can be readily pulled out. The heads of other species may be made to protrude by applying pressure, as with the foot, to the back or upper part of the shell. After the neck is well stretched out, the turtle can be readily decapitated. The dressing of the turtle after beheading is described by Clark and Southall 2/ as follows: ". . . a sharp knife is run around the edges of the skin where it joins the shell and the skin pulled back over the legs to the feet, which are then disjointed. The lower part of the shell or plastron is then removed by cutting through the bridges which join the upper and lower shells, cutting close to the lower part of the shell. With snappers and soft-shells, in which the bridges are rather soft and cartilaginous, this can be done with a sharp knife. With the terrapin the bridge may be cut with a hatchet or saw. Having cut the bridges, the plastron or under shell may be readily removed by inserting a sharp knife just under it and lifting it off. This done, the entrails may be extracted with very little trouble, and the four quarters easily taken out from the carapace or upper shell. If one wishes to save the tenderloin in the upper part or 'ceiling' of the carapace, the ribs may be cut with a hatchet. To the reader this may appear to be a lengthy and complicated process; but, . . . it is a simpler process than killing, plucking, and dressing a chicken."

People familiar with the use of turtle for edible purposes say that the snapper contains several kinds of meat. One man reported 6 or 7 kinds; another, 7 to 9 kinds; and still another, 14 kinds. Many city dwellers are not familiar with the use of turtle meat in any other way than in soups. No doubt, the demand for fresh-water turtles would be appreciably increased if there were a more general familiarity with the methods for the preparation of turtles for the table. There follow recipes for the preparation of turtle stew, fried snapper, and turtle cutlets.

"Snapper Stew"

4 lb. snapper meat	1½ pints water
1/3 lb. minced onion	Wine glass of Madeira wine
2 tbsp. flour	1 small clove of minced garlic
1/4 cup lard or olive oil	Bay leaf, thyme, and salt to taste

The meat is diced into cubes about 1 in. square. The onions are put into a pan with the lard or olive oil, and the garlic, to cook. When they are yellow the flour is added slowly. Then the meat is put in. When the surface of the meat is braised lightly the water is added slowly. When the stew approaches the boiling point the Madeira wine and seasoning are added. Simmer one hour.

Fried Snapper

Put the turtle meat into salt water overnight, take out, wipe dry, sprinkle with flour, and fry in plenty of grease. Fry slowly until brown. This is said to be better than fried chicken. For this old turtles are said to be as good as young.

Turtle Cutlet

Take lean turtle meat, pound until like hamburger steak, dip into egg, roll in meal, and fry in hot fat.

Other recipes which are available from the Bureau of Fisheries upon request include those for turtle soup, turtle chowder, steamed turtle, simmered turtle, curry of turtle, turtle rivola, turtle sausage, stewed terrapin with cream, and additional recipes for fried turtle.

2/ Fresh-water turtles: a source of meat supply, by H. Walton Clark and John B. Southall. Published as appendix VII to the report of the Commissioner of Fisheries for 1919.

WHOLESALE AND RETAIL PRICES

The weekly index of wholesale commodity prices as reported by the Bureau of Labor Statistics was 77.9 for the last week of March. This was .6 percent below the level for the week ending March 2 and nearly 2 percent above the corresponding week in 1939. The food groups index was 69.8 as compared with the figure of 100 for the 1926 average, a decrease of 1 percent both from the March 2, 1940, figure and that of April 1, 1939.

The Bureau of Labor Statistics also reports a general decrease in retail costs of food. An average drop of 1.3 percent between February 13 and March 12 was noted. This was reflected in lower food costs in 50 of the 51 cities included in the index. Lower prices were recorded for 23 foods, higher prices for 16, and for 22 there was no change.

The index for all foods was 77.1 percent of the 1923-25 average, compared with 78.1 percent on February 13, and 76.4 percent on March 14, 1939. Pink salmon reached an average retail price of 15.3 cents per 16-ounce can on March 12, 1940, and red salmon sold for an average of 25.4 cents on the same date. These figures represent increases of .7 percent per can for pink salmon and .4 percent per can for red salmon as compared with the figures for February 13, and 23.3 percent for pink salmon and 11.5 percent for red salmon since March 14, 1939.

VALUE OF NEW ENGLAND VESSEL LANDINGS INCREASES 27 PERCENT

Both volume and value of the February vessel landings at Boston and Gloucester, Mass., and Portland, Maine, showed increases when compared with the totals of the corresponding month in 1939. Fishery products totaling 27,144,000 pounds and valued at $898,000 to the fishermen were landed by fishing craft of 5 net tons capacity or over. The increase over February 1939 figures amounted to 9 percent in volume and 27 percent in value. Fisheries Statistical Bulletin No. 1372, recently published, outlines in detail these receipts.

Leading items landed included haddock, 10,764,000 pounds, valued at $426,000; rosefish, 5,765,000 pounds, valued at $76,000; cod, 5,405,000 pounds, valued at $207,000; flounders, 2,420,000 pounds, valued at $77,000; and pollock, 1,619,000 pounds, valued at $49,000. These items provided 96 percent of the volume and 93 percent of the value of the total receipts for February.

AVERAGE PRICE OF BOSTON FISH SALES CONTINUES TO RISE

An average price of 3.62 cents per pound for fish landed on the Boston Fish Pier has been reported by the Boston office of the Fishery Market News Service for the month of February. Total receipts during this month were 21,780,000 pounds, an increase of 4 percent from the total of the previous month and one-half of 1 percent greater than the Boston receipts for February 1939. The total value of the sales was approximately $788,000. Fish captured on 426 trips to the fishing grounds were included in the totals.

The February receipts included fish from offshore waters totaling 20,663,000 pounds. Haddock predominated in this figure, approximating 49 percent of the total while cod contributed 23 percent. Of the inshore total, 1,117,000 pounds, flounders contributed 44 percent, cod 27 percent, and rosefish 23 percent. Fares from offshore trips were listed at 212 while 214 fares were recorded from inshore waters.

FLOUNDERS PREDOMINATE IN NEW BEDFORD LANDINGS

New Bedford, Massachusetts, furnished a considerable part of the landings of the New England fisheries in 1939. A poundage of 27,553,000, valued at $1,351,000 to the fishermen, was landed. Of these totals, flounders supplied 58 percent of the volume and 35 percent of the value, and sea scallops, while furnishing only 17 percent of the volume, provided 46 percent of the value. The following tabulation lists the 1939 New Bedford landings, which include products received from vessels of five net tons and over in capacity.

LANDINGS BY FISHING VESSELS, 1939

New Bedford, Mass.

Species	Pounds	Value
Butterfish	184,500	$ 7,543
Cod	1,511,700	49,554
Eels	8,900	208
Flounders:		
Blackback	3,686,500	180,967
Dab	7,400	796
Fluke	80,700	8,079
Gray sole	70,700	2,356
Lemon sole	1,053,200	84,235
Yellowtail	10,955,000	200,682
Haddock	1,611,100	46,810
Hake	84,000	1,569
Halibut	1,800	242
Mackerel	3,131,600	114,100
Pollock	144,700	2,788
Ray	700	11
Rosefish	33,300	545
Scup	12,200	334
Sea bass	400	22
Shad	100	6
Sharks	1,000	29
Squid	1,500	40
Swordfish	126,500	27,333
Tilefish	49,200	2,561
Tuna	10,700	1,242
Whiting	16,800	266
Wolffish	2,800	30
Scallops, sea	4,765,900	618,315
Total	27,552,900	$1,350,663

FISHERIES OF NEW JERSEY

Recurring stormy weather during March reduced fishing activity in New Jersey to a point below its usual level, according to a report from the Bureau's statistical agent in that State. The shad fisheries in the Hudson River were thus handicapped; hard clam operations were curtailed; and gill net and pound net fisheries were likewise impaired.

Packaging of fish in New Jersey is reported to have fallen off through March of this year because of decreases in fish supplies and consumer demand. Fish liver oil and pearl button plants have been operating somewhat below normal so far this season.

FISHERIES OF MARYLAND

The severe winter weather of this year seriously handicapped the oyster dredgers and tongers in Chesapeake Bay. Reports indicated that fully 75 percent of the tongers were forced to suspend operations for several weeks. Many shucking houses ceased operations and the price of shell oysters reached a dollar a bushel to the fishermen at one time.

The Chesapeake run of shad has been very disappointing; a large run of striped bass is reported along the eastern shore of the Bay; and herring and white perch are being taken in good numbers in that section.

HALIBUT HEADS CHICAGO RECEIPTS

The receipts of fresh and frozen fishery products at the Chicago wholesale fish market increased 27 percent during February as compared with the January total. Fishery products received totaled 5,207,000 pounds including 71 classifications of seafood. This poundage represents an increase of 104 percent above the February 1939 total. Contributing to the receipts were 2,929,000 pounds of fresh-water fish, 1,616,000 pounds of salt-water fish, and shellfish amounting to 662,000 pounds. Halibut, a salt-water species, led all items, furnishing 740,000 pounds, which included a poundage of 614,000 shipped from British Columbia of which 571,000 pounds were caught by United States fishermen and shipped in bond. Second in importance in volume was whitefish with 692,000 pounds, while sauger with 640,000 pounds, rosefish fillets with 499,000 pounds, smelt with 295,000 pounds, and lake trout with 294,000 pounds also furnished important contributions. The halibut receipts reflected an increase of 88 percent over the amounts entering the Chicago market in February 1939 while those of whitefish reflected an increase of 368 percent. Rosefish fillets recorded a 309 percent rise while the receipts of smelt and lake trout were 304 percent and 121 percent over the figures reported for February 1939.

Important contributions from Canada in the February 1940 totals included 638,000 pounds of sauger and 189,000 pounds of whitefish from Manitoba, 162,000 pounds of whitefish from Saskatchewan, and 268,000 pounds of whitefish from Alberta.

Railway freight accounted for 49 percent of the total receipts, truck shipments provided 30 percent, and 21 percent of the total was shipped by express. Contributions from 26 States, Alaska, and 7 Provinces of Canada were included in the February receipts.

TENNESSEE LEADS STATES IN MUSSEL-SHELL PRODUCTION

Preliminary statistics released in Fisheries Special Memorandum No. 3522 place the value of the domestic production of fresh-water mussel-shell products at $2,483,000 in 1939 as compared with $2,699,000 in 1938. When ranked according to individual manufactured items, pearl buttons were the first in value, amounting to $2,429,000. Other products of this industry were poultry feed and lime from crushed shell, and miscellaneous products such as chips, stucco, and pearl novelties. During 1939, mussel-shell products were manufactured in 14 plants in Iowa, 2 in New York, and 1 each in Illinois, Wisconsin, and Missouri.

During 1939, shell purchases by manufacturing establishments aggregated $284,000 for 13,200 tons of shell as compared with $219,000 for 9,300 tons in the previous year. Classified by States, Tennessee led in the production of fresh-water mussel shell, with Arkansas second, Kentucky third, and Illinois fourth.

FISHERIES OF CALIFORNIA

The monthly report from the Bureau's statistical agent in California furnishes comments on a number of developments in the seasonal operations of this State's commercial fisheries. An outstanding feature among these is the increase in recent months in the fishing by small boats for mackerel. In previous years mackerel fishing has been done largely by the same vessels that take sardines. Winter catches did not produce a large percentage of the year's mackerel catch because these larger boats were used in the sardine fisheries during that time of year. This past winter the bulk of the fleet of small fishing boats has fished for mackerel almost exclusively, resulting in an increase of about 150 percent in the catch of mackerel in the first two months of 1940 as compared with the similar period for 1939. The increased catch of mackerel has been well received as sardine packing plants have not been able to operate to capacity upon the sardines available. Current information indicates that the mackerel catch for the 1939-40 season will be much higher than in the previous year.

Enlarged demand for sardines, largely a result of increased export trade, has increased profits in the handling of canned sardines during recent months. Consequently, a larger percentage of the catch of sardines is being utilized in canning. The sardine catch this

season is greater than that of the 1938-39 period but is still deficient as compared with a number of previous years.

The operations of the tuna fleet indicate that the 1940 catch of tuna will compare favorably with or exceed the largest takes of tuna for California. The catch through February was almost 42 percent greater than the catch for the same period of the 1939 season. Reports upon fishing off Mexico indicate that satisfactory catches have been made in that vicinity and that forthcoming landings will be large.

FISHERIES OF WASHINGTON

According to the Bureau's Washington agent, the winter salmon fishing season on the Columbia River was closed on March 1 to allow escapement to the spawning grounds of portions of the spring chinook runs. Commercial salmon fishing will be resumed on May 1. The winter season produced a catch described as "well above average". Winter trolling for salmon off the Washington coast also has been yielding comparatively high returns.

The smelt run on the Cowlitz River, while late, was unusually heavy. Prices early in March were the lowest since 1926 as a flood of smelt was placed on the markets. Receipts at Seattle to March 15 totaled about 130,000 pounds.

With the halibut season not opening till April 1, a number of the vessels of the halibut fleet have been engaging in fishing for other "groundfishes". To March 15 of this year these vessels have made a total of 70 trips of this type, landing at Seattle 660,000 pounds of sablefish, "ling cod", and rockfish. These fish have averaged about 5 cents per pound to the fishermen.

ANNUAL BULLETIN OF THE WASHINGTON STATE FISHERIES IS ISSUED

The annual bulletin of the State of Washington's Department of Fisheries (Bulletin No. 39) has recently been published. This summarizes the condition of the State's fisheries during 1939 and describes in particular the extent of the salmon fisheries by districts and species, including both commercial and sport fishing; statistics on halibut receipts; sales of fishing licenses; taxes collected; fish hatchery operations; stream improvement; biological surveys; and patrol operations.

Featured in this publication is a pictorial description of the rotary fish screen installation in the White River.

PACIFIC HALIBUT SEASON OPENS APRIL 1

Increased receipts of fresh fish at Seattle during the week ending April 6 were occasioned chiefly by the arrival of fresh halibut on the market. The first vessels arriving with halibut fares were the Betty D and the Albatross, which brought in nearly 3,000 pounds on April 4. Three vessels sold over the Seattle Fish Exchange on the following day at prices ranging from 17¼ to 17½ cents per pound for medium halibut and 16½ to 17¼ cents for chicken and large halibut. Prices opened at a substantially higher level than last year when the first fares sold at 13 3/4-14 1/4 cents per pound for mediums and 11-11 1/8 cents for chicken and large halibut. Although the price decline was much more pronounced during the first few days of the season this year the volume of halibut received was also much greater, a total of 260,900 pounds being brought in by 20 halibut vessels during the period April 4 to April 8, inclusive, this year as compared with 175,450 pounds brought in by 14 vessels during the same period last year. By April 8 prices had declined to 14-14½ and 11 cents per pound this year as compared with 12 3/4-13 1/8 and 11 cents per pound on the same date last year.

NEWFOUNDLAND COD-LIVER OIL PROSPECTS IMPROVE

A report published in Foodstuffs Round the World in its March 1 issue indicates that stocks of cod-liver oil in Newfoundland at the end of January were small. Oil being re-

ceived from fresh-caught fish is believed to be sufficient, however, to prevent a shortage prior to May or June when the fishery for groundfish becomes active. Refined Newfoundland cod-liver oil is demanding prices of $30 to $40 per 31-gallon barrel delivered at New York City but shippers believe that prices will be higher during the remaining months of 1940 owing to the effects of European hostilities upon shipments of these oils from Europe. The reports state that during the last 2 or 3 years the prices quoted for refined cod-liver oil have been below the cost of production, with the result that production has fallen off considerably while the output of common cod oil has increased. With a sufficient margin of profit in 1940 the production of refined oil undoubtedly will be much greater than that for 1939. The Newfoundland refiners have been requested to give cooperation to the Hull Laboratories of England to supply oil to make up for deficiencies due to withdrawal of British trawlers from fishing service to engage in war duties.

GERMAN FISHERIES HAMPERED BY SEVERE WINTER CONDITIONS

A report from Germany to the Bureau of Foreign and Domestic Commerce by one of its commercial agents states that the severity of the past winter has had a marked effect upon the fresh fish receipts in Germany. Fishing activities in the Baltic Sea have been in a state of virtual cessation during a large part of the winter months because of the ice. Reports indicate that there has been hardly a fishing ground in the Baltic that has not been blocked by ice. Not only have the fishing fleets of Germany been affected but the operations of fishing fleets of neighboring countries also have been hampered. The results have been reflected in a drop in Germany's imports of fish.

PORTUGUESE SARDINE PLANTS INTENSIFY OPERATIONS

Information released by the Portuguese Canned Fish Institute and furnished the Bureau of Foreign and Domestic Commerce through the American Consulate General at Lisbon indicates that Portuguese sardine canning plants which were to be closed during the four months beginning February 1, 1940, are being allowed to continue operations.

A special product labeled "winter pack" is being produced during the winter months. This designation is being used to allow consumers to differentiate between the lean fish packed during this period of the year, which is the spawning season, and the fish containing larger quantities of fat, which are packed during the other months.

The Institute states that the authorization to take sardines during the winter months is expected to be of great help to the canneries. The demand for sardines from abroad, especially from England, is very heavy.

RESUME OF THE JOINT REGULATIONS OF MARCH 18, 1940, CONCERNING WHALING

Joint Regulations of the Secretary of the Treasury and the Secretary of the Interior, concerning whaling, were approved by the President, March 18, 1940. Pursuant to the authority granted under the Convention for the Regulation of Whaling of September 24, 1931, and The Whaling Treaty Act of May 1, 1936, the Joint Regulations have provided specific enactments as follows:

A closed season has been declared in the territorial waters of the United States from April 1 to October 31.

A permit is required to take, kill, treat, import, or export whales taken for scientific purposes.

Reports covering the whale catch, employment, craft, and products of whaling must be filed with the Commissioner of Fisheries within 6 weeks after the close of the whaling season.

A distinction is drawn between suckling and immature whales.

A system is provided for the uniform numbering of whales and a standard of measurement is adopted for measuring whales.

The posting of the regulations at plants (land and sea) is required, as well as the maintenance of a tally board on the flensing deck of each plant showing the species, length, sex, length and sex of foetus, whether milk-filled or lactating, the time the whale was hauled up for flensing, the identification number of the whale catcher taking the whale, and the identification number of the whale as marked on the tail.

The size limits established in the Whaling Agreement of June 8, 1937--70 feet for blue whales, 55 for finbacks, and 35 for humpbacks--are incorporated in the new regulations but all under those limits under the regulations are designated as "immature"whales. In addition, the regulations establish a 40-foot limit on sei whales and a 22-foot limit on least rorquals, and designate as suckling calves, sei whales under 30 feet and least rorquals under 18 feet. The regulations adopt in their entirety certain provisions of the various international regulations and The Whaling Treaty Act, particularly relative to the use of factory ships and land stations, whaling by Eskimos, the assembling of data on the catch, etc. In addition, the rights and certain duties of United States Coast Guard Officers placed at these stations as inspectors are defined.

FROZEN FISH TRADE

Fish Frozen in 1939 Worth $13,300,000

In 1939, the freezing plants in the United States reporting their activities to the Government froze 163,408,000 pounds of fishery products, according to Fisheries Statistical Bulletin No. 1370. At the time that those products were held in cold-storage plants their value was estimated at about $13,300,000. Although the 1939 production of frozen fish was 1 percent below that of 1938, it was, with that exception, higher than in any other year on record. The items frozen in the greatest quantities were as follows: Haddock fillets, 19,367,000 pounds; whiting, 18,323,000 pounds; rosefish fillets, 18,152,000 pounds; halibut, 14,771,000 pounds; and shrimp, 12,118,000 pounds.

The freezing of fish was heaviest from May to December, inclusive, the quantities frozen each month during this period exceeding 15,000,000 pounds. During 1939, the average monthly holdings of frozen fish and shellfish in all sections amounted to 63,681,000 pounds as compared with 67,994,000 pounds in 1938, and 63,810,000 pounds in 1937. Monthly holdings averaged the highest in the New England section, while those in the Pacific section were second, and those in the Middle Atlantic section third.

Domestic Freezing of Fish Continues its Seasonal Decrease

Cold-storage plants in the United States and Alaska reported holdings amounting to 45,564,000 pounds on hand on March 15. Information on these holdings has been recently published by the Bureau of Fisheries in Statistical Bulletin No. 1371. The total holdings reflected a decrease of 27 percent when compared with the February 15 figure but a 13 percent increase over the total on hand on March 15, 1939. Principal items included were whiting, 3,798,000 pounds; mackerel, 2,976,000 pounds; salmon, 2,974,000 pounds; pollock fillets, 2,910,000 pounds; rosefish fillets, 2,394,000 pounds; and shrimp, 1,904,000 pounds. These figures reflect decreases varying from 21 percent in the stocks of rosefish fillets to 38 percent in the supplies of shrimp on hand. Halibut holdings decreased 50 percent while those of haddock fillets declined to a similar degree. Holdings of whitefish and sea herring increased slightly. The general decline in holdings of fishery products in cold storage appeared to be a continuation of the usual seasonal changes which are annually reflected in the handling of United States fish stocks. March is usually the month of lightest freezing volume. Limited freezing, coupled with continued removals of cold-storage stocks, make March a period of low holdings. A comparatively low total of 6,383,000 pounds of fishery products was reported as frozen during the month ending March 15 of this year. While this total was 7 percent less than that of the products frozen during the previous month, it reflected an increase

of 43 percent as compared with the total for the corresponding month in 1939. The most important items included in cold storage for the period ending March 15 were rosefish fillets, 1,134,000 pounds, 18 percent of the total; haddock fillets, 815,000 pounds, and shrimp, 810,000 pounds, each contributing 13 percent of the total; and cod, 357,000 pounds, or 6 percent of the total.

The stocks of cured herring in domestic cold-storage warehouses on March 15 totaled 15,067,000 pounds, a figure 8 percent lower than the February 15 total and 8 percent greater than the total for the corresponding period a year previous.

Mild-cured salmon stocks totaled 5,599,000 pounds, reflecting a 13 percent decrease from the total of February 15 and a 38 percent increase from that on March 15, 1939.

Boston Cold-storage Holdings Decline Further

The Market News Service reports Boston cold-storage holdings of frozen fishery products on the last Wednesday of March at 5,041,000 pounds. This is a decline of 2,766,000 pounds or 35 percent from the total of four weeks previous. The decline in the total was largely a result of a decrease of groundfish fillet stocks from 3,695,000 pounds to 1,904,000 pounds; mackerel, 1,595,000 pounds to 1,046,000 pounds; sea herring, 314,000 pounds to 172,000 pounds; whiting, 505,000 pounds to 327,000 pounds; and scallops, 317,000 pounds to 58,000 pounds. Smelt stocks increased from 234,000 pounds to 565,000 pounds. A decrease from 7,178,000 pounds to 4,643,000 occurred in the case of frozen salt-water fish supplies; fresh-water fish stocks declined from 18,000 pounds to a negligible 5,000 pounds; and shellfish stocks began the period at 611,000 pounds and ended it at 393,000 pounds.

The holdings of March 27 were 460,000 pounds greater than the stocks on hand on a corresponding date a year previous. This difference was almost completely absorbed in change of salt-water fish supplies, these being 451,000 pounds larger on March 27, 1940, than they were on March 29, 1939. Fresh-water fish stocks showed a decrease of 5,000 pounds, and shellfish stocks an increase of 14,000 pounds when compared with the supplies being held on the earlier date. Individual items showing marked change during the 12-month period were groundfish fillets, which increased from 1,525,000 pounds to 1,904,000 pounds; large and medium mackerel, which fell from 283,000 pounds to 138,000 pounds; small mackerel, which increased from 228,000 pounds to 908,000 pounds; smelt, increasing from 376,000 pounds to 565,000 pounds; swordfish, dropping from 387,000 pounds to 134,000 pounds; whiting, dropping from 780,000 pounds to 327,000 pounds; shrimp, declining from 149,000 pounds to 13,000 pounds; and squid, which increased from 143,000 pounds to 309,000 pounds.

Seasonal Decline in New York Cold-storage Holdings Continues

Limited additions to stocks of frozen fishery products in cold-storage warehouses in New York City permitted further decline in such stocks during the 4-week period ending March 28. Information on these holdings has been tabulated by the New York office of the Market News Service. On March 28 total holdings amounted to 5,248,000 pounds, including 2,591,000 pounds of salt-water items, 2,101,000 pounds of fresh-water varieties, and 556,000 pounds of shellfish. These totals are decreases from figures of 6,973,000 pounds, 3,742,000 pounds, 2,228,000 pounds, and 1,003,000 pounds, respectively, of 4 weeks previous.

Chinook salmon became the leading item among salt-water varieties, with 339,000 pounds on hand, as shad stocks reduced to 326,000 pounds and butterfish to 305,000 pounds. Large quantities of smelt, silver salmon, sablefish, and mackerel were also held on March 28. Of fresh-water items, whitefish and sturgeon remained of outstanding importance, these two items accounting for 1,690,000 pounds or 80 percent of the total for fresh-water varieties being held and 32 percent of the total for all classifications. Quantities of leading fresh-water items on hand included 974,000 pounds of whitefish, 716,000 pounds of sturgeon, and 179,000 pounds of ciscoes, of which the totals for sturgeon and ciscoes represented decreases when compared with February 29 holdings. Shellfish items included spiny lobster tails, 166,000 pounds; pulpi, 145,000 pounds; and shrimp, 122,000 pounds. Both lobster tail and and shrimp supplies suffered large decreases during the 4-week period.

When compared with the figure of a year ago, the current New York holdings display an increase. While shellfish supplies on hand were then 410,000 pounds greater than on the 1940 date, this difference was offset by amounts of salt-water fish 267,000 pounds less and fresh-water fish 314,000 pounds less than on the later date. Notable declines appeared in the stocks of Caspian salmon, swordfish, and shrimp, while important increases were registered for butterfish, sablefish, shad, and whitefish. Changes in stocks of Caspian salmon, swordfish, and sablefish are presumably due in large part to changes in the condition of foreign trade in the past 12 months.

Chicago Cold-storage Holdings at Standstill

Virtually no change was registered in the total holdings of frozen fishery products in cold-storage plants in Chicago during the four weeks preceding March 28. Figures tabulated by the Chicago office of the Fishery Market News Service listed these holdings at 4,182,000 pounds on March 28 compared with 4,179,000 pounds on hand four weeks earlier. Increases in stocks of blue pike and sauger and whitefish were offset in the total by decreases in supplies of lake herring and chubs, lake trout, and halibut.

The March 28 total was 754,000 pounds smaller than the holdings of the corresponding date in 1939, at which time 4,936,000 pounds were in stock. Smaller stocks of blue pike and sauger, halibut, and shrimp on hand on the later date accounted for the greater part of this difference. The only item available in considerably larger quantities on this year's date as compared with that of the last year was lake trout.

Current holdings of fresh-water items totaled 2,555,000 pounds, led by blue pike and sauger, 907,000 pounds; whitefish, 545,000 pounds; lake trout, 366,000 pounds; and lake herring and chubs, 274,000 pounds. Salt-water fish amounted to 1,100,000 pounds, to which rosefish fillets contributed 261,000 pounds. Shrimp supplied 238,000 pounds to a reported total of 372,000 pounds of shellfish. Unclassified items were listed at 155,000 pounds.

Canadian Cold-storage Fish Stocks Continue to Diminish

Stocks of frozen fresh fishery products on hand in Canadian cold-storage plants on April 1 amounted to 13,946,000 pounds. This preliminary figure, compiled by the Dominion Bureau of Statistics, represented a decline of 25 percent in the total holdings since March 1, and a 28 percent drop since April 1, 1939. Sea herring contributed 31 percent of the total, and whitefish, mackerel, and cod also furnished important portions.

Frozen smoked fishery products were also stored in Canadian plants, 1,727,000 pounds of these products being held on April 1. This was an amount 3½ percent larger than that on hand on March 1, and was almost identical with the supplies in storage on April 1, 1939. Groundfish fillets, finnan haddie, and sea herring kippers composed 95 percent of this total.

March freezings by these cold-storage plants totaled 2,337,000 pounds, 58 percent consisting of frozen fresh products and 42 percent, frozen smoked items. Cod fillets comprised 60 percent of the fresh items and groundfish fillets, 74 percent of those smoked. The total of products frozen was a 25 percent drop from the February figure and a 15 percent gain over the March 1939 freezings.

CANNED FISH TRADE

Stocks of Canned Salmon Move Slowly

Unsold stocks of canned salmon in the hands of packers on March 31 totaled 1,369,000 standard cases of 48 one-pound cans, according to a report issued by the Association of Pacific Fisheries. Included were 33,000 cases of chinook or king salmon; 104,000 cases of humpback or pink; 65,000 cases of silver or coho; 985,000 cases of Alaska red; and 27,000 cases of Puget Sound sockeye. Limited sales during the month allowed the total stocks to

exceed the holdings of the corresponding date in 1939, at which time 1,322,000 cases were held. Of the current stocks, Alaska red salmon contributed 72 percent, 171,000 cases in excess of the March 31, 1939, total for this item.

Pacific Salmon Pack Shows Decrease in 1939

Bureau of Fisheries' Special Memorandum No. 2236 indicates that the Pacific pack of canned salmon in 1939, exclusive of the Soviet production, amounted to 9,759,000 standard cases of 48 one-pound cans as compared with 11,300,000 cases in 1938 and 11,473,000 cases in 1937.

The 1939 production was allocated among the several producing areas as follows: Alaska, 5,263,000 cases; Pacific Coast States, 729,000 cases; British Columbia, 1,539,000 cases; Siberia, Japanese production only, 1,124,000 cases; and Japan, 1,104,000 cases. Comprising the total pack were 255,000 cases of chinook salmon; 3,148,000 cases of red, blueback or sockeye; 534,000 cases of silver or coho; 4,737,000 cases of humpback or pink; 1,058,000 cases of chum or keta; and 27,000 cases of steelhead trout.

As compared with 1938, the 1939 pack of canned salmon decreased in all of the producing regions except the Pacific Coast States, where a sharp increase in the pack occurred chiefly because of the biennial cyclic appearance of pink salmon in this area.

In 1939, the total Pacific production of sockeye and silver salmon each decreased 25 percent; chum, 24 percent; and humpback, less than 1 percent as compared with the pack in 1938. Chinook production increased 9 percent; and steelhead trout, 67 percent.

Shrimp Canning Inactive

Only 4,000 standard cases of shrimp were canned during the month ending March 30, the shrimp pack for the season reaching a total of 1,068,000 standard cases. These figures represent the pack of 40 plants in the Gulf and South Atlantic States operating under the Seafood Inspection Service of the Food and Drug Administration. During a corresponding part of the 1938-39 season there were 1,001,000 cases of shrimp packed.

California Sardine Pack Continues to Increase

The pack of canned sardines in California for the first six months of the 1939-40 season through February amounted to 3,043,000 standard cases of 48 one-pound cans, as evidenced by statistics published in the preliminary monthly statement of California's Division of Fish and Game. The 1939-40 pack increased 29 percent over the 1938-39 pack of 2,365,000 cases for the same period. The total production in the State during February 1940 was 378,000 cases as compared with 365,000 cases in February 1939. For the current season beginning in September, the pack by districts has been as follows: Monterey, 58 percent; Southern California, 33 percent; and San Francisco, 9 percent.

California Tuna Pack nearly 50 percent Higher than 1939

The pack of tuna and tunalike fishes in California during the first two months of 1940, which amounted to 301,000 cases of 48 one-half pound cans, increased about 49 percent over the pack for the same period in 1939, according to the preliminary statistical release of California's Division of Fish and Game. Of the total volume packed, 88 percent consisted of yellowfin tuna and 89 percent was produced in the San Diego district. Other varieties, arranged according to volume canned, were striped tuna; bonito; tuna flakes; tuna, tonno style; yellowtail; and bluefin tuna.

Mackerel Pack in California Increases 125 percent

About 300,000 cases (48 one-pound cans) of mackerel have been canned in California during the first two months of the calendar year 1940, as shown in preliminary data released by the Division of Fish and Game of the State of California. This quantity represents a 125 percent increase over the production for January and February of last year. Ninety-eight percent of the season's pack so far has been produced in the San Pedro district.

Oyster Canning Produces Third Largest Pack

According to a preliminary statement issued by the Bureau of Fisheries as Special Memorandum 2162, the domestic pack of canned oysters in 1939 amounted to 616,000 standard cases, valued at $2,446,000. This compares with the production of 482,000 cases, valued at $1,886,000, during 1938, and represents the third highest pack in the 19 years that these data have been collected annually. The 1939 pack was exceeded only by the packs of 1924 and 1937.

Mississippi led all States in the production of canned oysters, the pack in that State amounting to 282,000 cases, valued at over one million dollars. The Washington and Oregon production amounted to 113,000 cases of Pacific (Japanese) oysters, including 4,000 cases of canned smoked oysters.

FOREIGN TRADE MOVEMENT BRISK

Despite unsettled conditions in many nations of import origin and export destination, the United States' foreign trade in edible fishery commodities maintained proportions of considerable magnitude through February. Figures compiled by the Bureau of Foreign and Domestic Commerce show that February imports of these commodities totaled 31,115,000 pounds and exports reached a poundage of 18,144,000. Both totals were increases over February figures for 1938 and 1939.

The import total of 31,115,000 pounds was an increase of 15 percent over the February 1939 figure and a decrease of 20 percent from the abnormally high January total. Important contributions to this figure were arrivals of fresh and frozen fresh-water fish, 6,294,000 pounds; pickled and salted cod, haddock, and hake, 4,750,000 pounds; salted and pickled herring, 4,628,000 pounds; canned sardines, 1,889,000 pounds; and canned crab meat, 1,828,000 pounds. Salted and pickled herring imports were 144 percent greater than in February 1939 and those of canned crab meat showed a 88 percent increase. Canned sardines and pickled and salted cod, haddock, and hake were the only important items registering increases over the January 1940 totals, these increases amounting to 85 and 60 percent respectively.

The increasing demand for American food exports caused edible fishery commodities totaling 18,144,000 pounds to be shipped during February. The 2-month total for January and February reached 35,396,000 pounds--larger than that of any other consecutive two months since February and March 1937. The February total was 5 percent larger than the January figure and 45 percent over that for February 1939. The increased exports were largely due to enlarged shipments of canned sardines, 10,238,000 pounds of these products being exported in February of this year. This brought the 2-month total for sardine shipments to 21,978,000 pounds. Canned salmon amounting to 6,065,000 pounds and 426,000 pounds of canned shrimp were also included in the February exports.

ENGLAND BECOMES CHIEF EXPORT OUTLET FOR CANNED SARDINES

The Bureau of Foreign and Domestic Commerce has published in its March 15 issue of Foodstuffs Round the World a summary of recent developments in the exporting of canned salmon and canned sardines from the United States. This report indicates that smaller supplies of canned salmon in the United States, higher prices for these products, increased transporta-

tion costs, maximum price regulation in England, and plentiful supplies of oriental salmon on the British market at the beginning of the season have been the chief factors responsible for a 37 percent decline in our salmon exports in the 1939-40 season through January 31, 1940, as compared with the same period of the 1938-39 season. Our exports of salmon to England rose to 59,300 cases in January 1940 from the December 1939 figure of 40,500 cases but still remained below the January 1939 exports of 82,300 cases.

The following table lists exports of canned salmon and canned sardines in the present season compared with those shipments made in an equivalent period last year.

EXPORTS OF CANNED SALMON AND CANNED SARDINES
FROM THE UNITED STATES

(In standard cases)

Commodity and Country	1938-39 Season	1939-40 Season	Percent Change
	Cases	Cases	
Canned Salmon (July 1-Jan. 31):			
Total	808,000	506,100	-37
Belgium	3,860	3,670	-5
France	30,480	4,600	-85
Netherlands	16,650	7,180	-57
United Kingdom	644,000	413,000	-36
Philippine Islands	13,000	15,280	+18
Canned Sardines (Aug. 1-Jan. 31):			
Total	554,900	866,900	+56
Belgium	11,720	16,990	+45
France	1,460	--	--
Netherlands	7,940	4,140	-48
United Kingdom	61,400	281,300	+360
Canada	25,390	69,700	+170
Philippine Islands	193,300	168,700	-13

The exports of canned sardines increased 56 percent during the 1939-40 season through January 31, 1940, as compared with the same period of the 1938-39 season. Buying by England was the principal factor responsible for this increase. This buying has made England the principal export outlet for our canned sardines during the current marketing year. Shipments to England reached a peak in January 1940 when a total of 115,300 cases was exported, compared with only 17,200 cases shipped in January a year previous.

Control authorities in British Malaya ceased issuing permits for new shipments of sardines in order to prevent further aggravation of a heavily overstocked position of canned sardines in that market. Sardines were among the principal imports into British Malaya from the United States during 1939.

NORWAY'S COD-LIVER OIL MARKETS EXPERIENCE CHANGE

Norwegian exporters of cod-liver oils are rapidly gaining a foothold on the British market, according to Foodstuffs Round the World. This is largely due to the fact that only about one-third of the British trawler fleet is occupied in fishing and the fish livers provided by present operations of the fleet are not sufficient to cover England's demands.

December 1939 exports of cod-liver oils from Norway to the United States amounted to 79,500 gallons. This quantity represents a decline of 62 percent from that of December 1938. Total exports of these oils in December 1939 to all countries amounted to 705,700 gallons,

28 percent greater than the December 1938 total. The decrease in American purchases has been due to prevailing high prices.

NORWAY 1939 CANNED FISH EXPORTS CONSIDERED AVERAGE

Norwegian exports of canned fish during 1939 were considered average, according to information published in the Norwegian Canners Export Journal and summarized in Foodstuffs Round the World. Total exports of canned fish amounted to an equivalent of 3,317,000 standard cases of 24 pounds net weight. This total represents a one-fourth increase over the 1938 canned fish export total of 2,426,000 cases and it is only slightly under the 1937 figure of 3,330,000 cases. A comparison of exports of canned fish for the years 1938 and 1939 is made in the following table.

EXPORTS OF PRINCIPAL CANNED FISH ITEMS FROM NORWAY*

	December		January-December	
	1938	1939	1938	1939
	Cases	Cases	Cases	Cases
Smoked Small Sild in Oil....	91,000	106,000	851,000	1,228,000
Smoked Brisling in Oil.....	136,000	69,000	517,000	750,000
Smoked Small Sild in Tomato.	21,000	49,000	144,000	268,000
Smoked Brisling in Tomato.....	21,000	24,000	67,000	82,000
Unsmoked Small Sild in Oil....	10,000	20,000	85,000	157,000

* Converted to standard cases of 100 No. ¼ tins, net weight 24 pounds per case.

According to the Norwegian Journal, "The demand from our main markets has not yet resumed. Stocks of Norwegian canned goods are presumably well supplied in the United States by the brisk import last fall, and a normal demand cannot be expected yet for some time ahead." In this connection, Foodstuffs Round the World states that representative distributors in the United States reported stocks of imported sardines as of January 1, 1940, as 9 percent greater than the stocks on hand on the same date a year earlier.

THE COVER PAGE

Of the average of 13.3 pounds of fishery commodities consumed annually by each American, about 8 pounds consists of fresh and frozen products. The averages of consumption, however, vary greatly among cities, depending upon their proximity to the supply. Thus, the per capita consumption of fresh and frozen fish in New York City is 32 pounds; San Francisco 20 pounds; Jacksonville 18 pounds; Atlanta and Pittsburgh 11 pounds each; St. Louis 9 pounds; and Louisville 6 pounds. Further, the consumption of fresh and frozen fish in rural communities usually is less than in urban areas. Most important in the retail marketing of fish is the use of attractive displays where the scores of different species await the consuming buyer. Illustrative of such displays in the retail stores throughout the country is that in a fish store in Washington, D. C., which is depicted on the cover page.

FISHERY TRADE INDICATORS
(Expressed in Thousands of Pounds)

Item	Month	Latest month	Same month a year ago	Previous month
FRESH FISH LANDINGS				
Boston, Mass.	February	22,043	22,375	20,556
Gloucester, Mass.	do	3,921	1,815	3,189
Portland, Me.	do	1,180	612	1,251
Boston, Gloucester, and Portland:				
Cod	do	5,405	5,563	4,105
Haddock	do	10,764	10,248	8,969
Pollock	do	1,619	1,334	2,716
Rosefish	do	5,765	5,259	6,524
FISH RECEIPTS, CHICAGO 1/				
Salt-water fish	do	1,615	753	1,007
Fresh-water fish	do	2,929	1,405	2,304
Shellfish, etc.	do	662	396	789
By truck	do	1,536	591	1,048
By express	do	1,115	393	1,204
By freight	do	2,556	1,570	1,849
COLD-STORAGE HOLDINGS 2/				
New York, N. Y.:				
Salt-water fish	March	2,592	2,325	3,742
Fresh-water fish	do	2,101	1,786	2,228
Shellfish, etc.	do	556	966	1,003
Boston, Mass.:				
Salt-water fish	do	4,643	4,193	7,178
Fresh-water fish	do	5	10	18
Shellfish, etc.	do	393	379	611
Chicago, Ill.:				
Salt-water fish	do	1,100	1,315	1,334
Fresh-water fish	do	2,555	2,886	2,298
Shellfish, etc.	do	372	456	427
Unclassified	do	155	278	119
United States:				
Cod fillets	do	724	603	1,416
Haddock fillets	do	1,711	1,568	3,303
Halibut	do	1,319	1,791	2,658
Mackerel	do	2,976	1,899	4,278
Pollock fillets	do	2,910	1,368	4,458
Rosefish fillets	do	2,394	591	3,029
Salmon	do	2,974	4,838	4,379
Whiting	do	3,798	3,751	5,714
Shrimp	do	1,904	4,108	3,051
New England, all species	do	13,372	8,341	19,783
Middle Atlantic, all species	do	9,873	9,535	12,823
South Atlantic, all species	do	2,453	1,737	4,193
North Central East, all species	do	9,406	8,129	11,101
North Central West, all species	do	2,803	2,954	3,599
South Central, all species	do	930	1,298	1,407
Pacific, all species	do	6,728	8,429	9,486
FOREIGN FISHERY TRADE 3/				
Exports:				
All edible fishery commodities	February	18,144	12,491	17,252
Canned salmon	do	6,065	3,416	3,473
Canned sardines	do	10,238	6,085	11,740
Canned shrimp	do	426	435	118
Imports:				
All edible fishery commodities	do	31,115	26,983	38,836
Fresh-water fish and eels, fresh or frozen	do	6,294	5,405	7,426
Canned tuna	do	938	517	2,281
Canned sardines	do	1,889	2,453	1,018
Cod, haddock, hake, etc., pickled or salted	do	4,750	4,802	2,973
Herring, pickled or salted	do	4,628	1,899	7,017
Crab meat, sauce, etc.	do	1,828	970	6,879
Lobsters, not canned	do	752	691	1,449
Lobsters, canned	do	60	45	118

1/ Includes all arrivals as reported by express and rail terminals, and truck receipts as reported by wholesale dealers, including smokers.

2/ Data for individual cities are as of the last Thursday of the month, except those at Boston which are for the last Wednesday of the month, and those for geographical areas and the total of the United States which are as of the 15th of the month.

3/ From data compiled by the Bureau of Foreign and Domestic Commerce.

Note.--Date for the latest month are subject to revision.

PRINCIPAL FIELD OFFICES AND LABORATORIES OF THE U. S. BUREAU OF FISHERIES

Division of Fishery Industries

Boston, Mass.	B. E. Lindgren	253½ Northern Ave. Market News Service
Chicago, Ill.	E. C. Hinsdale	200 N. Jefferson St. Market News Service
College Park, Md.	J. M. Lemon	Horticultural Bldg., U. of Md. Fish. Tech. Laboratory
Jacksonville, Fla.	S. C. Denham	309 Duval Bldg. Market News Service
New Orleans, La.	C. E. Peterson	1100 Decatur St. Market News Service
New York, N. Y.	W. H. Dumont	33-A Fulton St. Market News Service
San Pedro, Calif.	C. B. Tendick	Post Office Bldg. Fishery Statistics
Seattle, Wash.	V. J. Samson	421 Bell St. Terminal. Market News Service
Seattle, Wash.	R. W. Harrison	2725 Montlake Blvd. Fisheries Tech. Laboratory

Division of Fish Culture

LaCrosse, Wis.	C. F. Culler	Regional Headquarters
Seattle, Wash.	F. J. Foster	2725 Montlake Blvd. Regional Headquarters

Division of Scientific Inquiry

Ann Arbor, Mich.	Dr. John Van Oosten	University Museums. Great Lakes Fish. Investigations
Beaufort, N. C.	Dr. Herbert F. Prytherch	Fisheries Biological Laboratory
Cambridge, Mass.	W. C. Herrington	Room A-210 Harvard Biol. Lab. N.At.Fish. Investigations.
College Park, Md.	Robert A. Nesbit	Horticultural Bldg., U. of Md. Mid. & S. At. Fish. Invest.
Columbia, Mo.	Dr. M. M. Ellis	101 Willis Ave. Interior Waters Investigations
Milford, Conn.	Dr. Victor Loosanoff	Fish. Laboratory. New England Oyster Investigations
New Orleans, La.	M. J. Lindner	336 Chartres St. Gulf Shrimp Investigations
Pensacola, Fla.	Dr. A. E. Hopkins	Box 1826. Gulf Oyster Investigations
Seattle, Wash.	Dr. F. A. Davidson	2725 Montlake Blvd. Fisheries Biological Laboratory.
Stanford University, Calif.	O. E. Sette	Room 450-B Jordan Hall. Pilchard investigations

Division of Alaska Fisheries

Juneau, Alaska	Ralph A. Ferrandini	Federal Bldg. Alaska Fisheries Service
Seattle, Wash.	C. L. Olson	706 Federal Bldg. Alaska Fisheries Service

FISHERY INDUSTRIAL AND MARKETING PUBLICATIONS

There follows a list of some of the industrial or marketing publications of the Bureau of Fisheries, which are available for purchase from the Superintendent of Documents, Government Printing Office, Washington, D. C., at the prices quoted. Price list 21, the most complete list of Bureau sales publications, may be obtained from the Superintendent of Documents, free of charge.

INVESTIGATIONAL REPORTS

No. 43. Some Effects of Ultraviolet Irradiation of Haddock Fillets. 1939. 5¢.
No. 42. A Plan for the Development of the Hawaiian Fisheries. 1939. 10¢.
No. 41. The Mineral Content of the Edible Portions of Some American Fishery Products. 1938. 5¢.
No. 40. Pacific Salmon Oils. 1939. 5¢.
No. 39. Trade in Fresh and Frozen Fishery Products and Related Marketing Considerations in the San Francisco Bay Area. 1938. 10¢.
No. 38. Marketing of Shad on the Atlantic Coast. 1938. 10¢.
No. 37. Preliminary Report on the Cause of the Decline of the Oyster Industry of the York River, Va., and the Effects of Pulp-mill Pollution on Oysters. 1938. 10¢.
No. 32. Studies on Drying Cod and Haddock Waste. 1935. 5¢.
No. 30. Effect of Manufacture on the Quality of Nonoily Fish Meals. 1935. 5¢.
No. 28. Studies on the Utilization of Swordfish Livers. 1935. 5¢.
No. 26. Fishery for Red Snappers and Groupers in the Gulf of Mexico. 1935. 5¢.
No. 25. The Iodine Content of Some American Fishery Products. 1935. 5¢.
No. 24. Modifications in Gear Curtail the Destruction of Undersized Fish in Otter Trawling. 1935. 5¢.
No. 21. Shrimp Industry of the South Atlantic and Gulf States. 1934. 10¢.
No. 20. Studies on the Smoking of Haddock. 1934. 5¢.
No. 18. The Iodine Content of Oysters. 1934. 5¢.
No. 16. Developments in Refrigeration of Fish in the United States. 1932. 5¢.
No. 14. Fisheries of the Virgin Islands of the United States. 1932. 5¢.
No. 13. Fisheries of Puerto Rico. 1932. 5¢.
No. 7. Market for Marine Animal Oils in the United States. 1931. 15¢.
No. 1. Menhaden Industry. 1931. 25¢.

FISHERY CIRCULARS

No. 25. Natural History and Methods of Controlling the Common Oyster Drills. 1937. 5¢.
No. 23. Decline in Haddock Abundance on Georges Bank and a Practical Remedy. 1936. 5¢.
No. 22. Organizing and Incorporating Fishery Cooperative Marketing Associations. 1936. 5¢.
No. 21. The Story of Oysters. 1936. 5¢.
No. 19. Practical Fish Cookery. 1935. 5¢.
No. 18. Conditions Affecting the Southern Winter Trawl Fishery. 1935. 5¢.
No. 15. Aquatic Shell Industries. 1934. 5¢.
No. 12. Introduction of Japanese Oysters into the United States. 1932. 5¢.
No. 11. Some Unusual Markets for Fish and Shellfish. 1932. 5¢.
No. 3. Market for Fresh Oysters in 14 Cities of the United States. 1931. 10¢.

ECONOMIC CIRCULARS

No. 74. Application of Preservatives to Fishing Nets. 1931. 5¢.
No. 69. Salmon--an Economical and Valuable Food. 1929. 10¢.

DOCUMENTS

No. 1092. Pacific Salmon Fisheries. 1930. 65¢.
No. 1078. Utilization of Shrimp Waste. 1930. 10¢.
No. 1075. Net Preservative Treatments. 1930. 5¢.
No. 1065. Bibliography on Cod-liver Oil in Animal Feeding. 1929. 10¢.
No. 1059. Fishing Grounds of the Gulf of Maine. 1929. 25¢.

ADMINISTRATIVE REPORTS

No. 35. Progress in Biological Inquiries, 1938. 15¢.
No. 34. Propagation and Distribution of Food Fishes, Fiscal Year 1938. 10¢.
No. 32. Fishery Industries of the United States, 1937. 25¢.
No. 31. Alaska Fishery and Fur-seal Industries in 1937. 15¢.

ORDERS FOR THE ABOVE-LISTED PUBLICATIONS SHOULD BE FORWARDED DIRECT TO THE SUPERINTENDENT OF DOCUMENTS, GOVERNMENT PRINTING OFFICE, WASHINGTON, D. C., AND NOT TO THE BUREAU OF FISHERIES

THE MINERAL CONTENT OF THE EDIBLE PORTIONS OF SOME AMERICAN FISHERY PRODUCTS

Investigational Report No. 41

In addition to the established value of fishery products as protein foods and the importance of many of them as sources of vitamins, seafoods also are excellent sources of many essential minerals, according to Fisheries Investigational Report No. 41, entitled "The Mineral Content of the Edible Portions of Some American Fishery Products", by Hugo M. Nilson and E. J. Coulson. The report brings out the following facts, among others:

1. The flesh of canned salmon is an excellent source of protein and calories. The bones are soft and are an exceptional source of bone forming minerals. Canned salmon contains an equal quantity of magnesium, almost twice the phosphorus and about fifteen times as much calcium as beef round.

2. Oysters are an excellent source of iron and copper and are one of the best sources of iodine. They follow pork and beef as a source of iron and are first in copper content among common food stuffs on the basis of an average serving portion. They also contain almost half as much calcium, 5 times as much magnesium and more phosphorus than milk on an equal weight basis.

3. Shrimp contain an equal quantity of phosphorus, twice the magnesium, and almost 5 times as much calcium as beef round. They include almost one-half the iron content of oysters and the copper content approximates that of white bread. Shrimp also is an excellent source of iodine.

The report also includes information on the mineral content of fillets and crab meat and discusses the daily requirements of essential minerals.

The report may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., for 5 cents. If purchased in quantity lots of 100 or more, a discount of 25 percent is allowed.

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